Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An adjustable-length compression spring, comprising

- a casing (1), which is filled with a free-flowing pressure fluid and has a central longitudinal axis (7);

- a guide and seal unit (6), which closes a first end (5) of the casing (1);

- a piston rod (8), which has an outer end (9) and is sealingly extended through the guide and seal unit (6) out of the first end (5) of the casing (1);

- a piston (12), which is connected to the piston rod (8) and sealingly guided in the casing (1);

- a pressure-fluid-filled first sectional casing chamber (15), which is unilaterally defined by the piston (12);

- an energy accumulator (19; 46; 64) for exercising pressure on the pressure fluid;

- a pressure-fluid-filled second sectional casing chamber (16), which is connectable to the first sectional casing chamber (15); and

- a controllable valve (20; 50) for interconnection of the sectional casing chambers (15, 16) by an actuation/overflow assembly (37), the valve (20; 50) having a valve pin (24), which is movable from outside the casing (1) into an open position of the controllable valve (20; 50) and into a shut-off position;

wherein the compression spring has an automatic additional valve (41) for interconnection of the sectional casing chambers (15, 16) by an automatic overflow connection (44), the automatic valve (41) comprising a valve element (41a), in form of an annular disk, having an inner portion received within an inwardly directed peripheral groove (45) such that said annular disk is axially pre-loaded as a saucer spring in a shut-off position such that, in the valve-pin-(24) shut-off position of the controllable valve (20; 50), opening the automatic valve (41) into an open position takes place only when an overcoming force F_1 works between the piston rod (8) and the casing (1) in a piston-rod push-out direction (36a), with

$$-2F_2 < F_1 < 2F_2$$

applying to a relationship between the overcoming force F_1 and a push-out force F_2 which, by the pressure of the pressure fluid, works between the piston rod (8) and the casing (1) in the sectional casing chambers (15, 16) in a

piston-rod push-out direction (36a) in the open position of the valve pin (24) of the controllable valve (20; 50).

2. (Original) A compression spring according to claim 1, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < F_2$.

3. (Original) A compression spring according to claim 1, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $-F_2 < F_1 < 0$.

4. (Original) A compression spring according to claim 1, wherein the valve element (41a) of the automatic valve (41) is a composite body with a substrate layer (42) that is at least unilaterally coated with a non-metal layer (43).

5. (Original) A compression spring according to claim 4, wherein the substrate layer (42) of the valve element (41a) is made of metal.

6. (Original) A compression spring according to claim 4, wherein the non-metal layer (43) of the valve element (41a) is made of one of the group selected from plastic material and rubber.

7. (canceled).

8. (Original) A compression spring according to claim 1, wherein the energy accumulator is a compressed-gas chamber (19).

9. (canceled)

10. (Original) A compression spring according to claim 1, comprising oil as a pressure fluid.

11. (canceled)

12. (Original) A compression spring according to claim 2, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < 0.5\ F_2$.

13. (Original) A compression spring according to claim 2, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < 0.1\ F_2$.

14. (Original) A compression spring according to claim 2, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $F_1 = 0$.

15. (Original) A compression spring according to claim 3, wherein the automatic valve (41) is designed such

that the force F_1 to F_2 relationship is as follows: - $0.5\ F_2 < F_1 < 0$.

16. (Original) A compression spring according to claim 3, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $-0.1\ F_2 < F_1 < 0$.

17. (Previously Presented) An adjustable-length compression spring, comprising

- a casing (1), which is filled with a free-flowing pressure fluid and has a central longitudinal axis (7);

- a guide and seal unit (6), which closes a first end (5) of the casing (1);

- a piston rod (8), which has an outer end (9) and is sealingly extended through the guide and seal unit (6) out of the first end (5) of the casing (1);

- a piston (12), which is connected to the piston rod (8) and sealingly guided in the casing (1);

- a pressure-fluid-filled first sectional casing chamber (15), which is unilaterally defined by the piston (12);

- an energy accumulator (19; 46; 64) for exercising pressure on the pressure fluid;

- a pressure-fluid-filled second sectional casing chamber (16), which is connectable to the first sectional casing chamber (15); and

- a controllable valve (20; 50) for interconnection of the sectional casing chambers (15, 16) by an actuation/overflow assembly (37), the valve (20; 50) having a valve pin (24), which is movable from outside the casing (1) into an open position of the controllable valve (20; 50) and into a shut-off position;

wherein the compression spring has an additional automatic valve (41) for interconnection of the sectional casing chambers (15, 16) by an automatic overflow connection (44), the automatic valve (41) comprising a valve element (41a), in form of an annular disk, having an inner portion received within an inwardly directed peripheral groove (45) such that said annular disk is axially pre-loaded as a saucer spring in a shut-off position such that, in the valve-pin-(24) shut-off position of the controllable valve (20; 50), opening the automatic valve (41) into an open position takes place only when an overcoming force F_1 works between the piston rod (8) and the casing (1) in a piston-rod push-out direction (36a), with

$$-2F_2 < F_1 < 2F_2$$

applying to a relationship between the overcoming force F_1 and a push-out force F_2 which, by the pressure of the pressure fluid, works between the piston rod (8) and the casing (1) in the sectional casing chambers (15, 16) in a piston-rod push-out direction (36a) in the open position of the valve pin (24) of the controllable valve (20; 50);

wherein the valve element (41a) of the automatic valve (41) is a composite body with a substrate layer (42) that is at least unilaterally coated with a non-metal layer (43).

18. (Previously Presented) A compression spring according to claim 17, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < F_2$.

19. (Previously Presented) A compression spring according to claim 17, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $-F_2 < F_1 < 0$.

20. (Previously Presented) A compression spring according to claim 17, wherein the substrate layer (42) of the valve element (41a) is made of metal.

21. (New) A compression spring according to claim 17, wherein the non-metal layer (43) of the valve element (41a) is made of one of the group selected from plastic material and rubber.

22. (New) A compression spring according to claim 17, wherein the energy accumulator is a compressed-gas chamber (19).

23. (New) A compression spring according to claim 17, comprising oil as a pressure fluid.

24. (New) A compression spring according to claim 18, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < 0.5\ F_2$.

25. (New) A compression spring according to claim 18, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < 0.1\ F_2$.

26. (New) A compression spring according to claim 18, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $F_1 = 0$.

27. (New) A compression spring according to claim 19, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $-0.5\ F_2 < F_1 < 0$.

28. (New) A compression spring according to claim 19, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $-0.1\ F_2 < F_1 < 0$.

29. (New) An adjustable-length compression spring, comprising

- a casing (1), which is filled with a free-flowing pressure fluid and has a central longitudinal axis (7);

- a guide and seal unit (6), which closes a first end (5) of the casing (1);

- a piston rod (8), which has an outer end (9) and is sealingly extended through the guide and seal unit (6) out of the first end (5) of the casing (1);

- a piston (12), which is connected to the piston rod (8) and sealingly guided in the casing (1);

- a pressure-fluid-filled first sectional casing chamber (15), which is unilaterally defined by the piston (12);

- an energy accumulator (19; 46; 64) for exercising pressure on the pressure fluid;

- a pressure-fluid-filled second sectional casing chamber (16), which is connectable to the first sectional casing chamber (15); and

- a controllable valve (20; 50) for interconnection of the sectional casing chambers (15, 16) by an actuation/overflow assembly (37), the valve (20; 50) having a valve pin (24), which is movable from outside the casing (1) into an open position of the controllable valve (20; 50) and into a shut-off position;

wherein the compression spring has an automatic valve (41) for interconnection of the sectional casing chambers (15, 16) by an automatic overflow connection (44), the automatic valve (41) comprising a valve element (41a), which is an annular disk self pre-loaded in a shut-off position such that, in the valve-pin-(24) shut-off position of the controllable valve (20; 50), opening the automatic valve (41) into an open position takes place only when an overcoming force F_1 works between the piston rod (8) and the casing (1) in a piston-rod push-out direction (36a), with

$$-2F_2 < F_1 < 2F_2$$

applying to a relationship between the overcoming force F_1 and a push-out force F_2 which, by the pressure of the pressure fluid, works between the piston rod (8) and the casing (1) in the sectional casing chambers (15, 16) in a piston-rod push-out direction (36a) in the open position of the valve pin (24) of the controllable valve (20; 50).

30. (New) A compression spring according to claim 29, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < F_2$.

31. (New) A compression spring according to claim 29, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $-F_2 < F_1 < 0$.

32. (New) A compression spring according to claim 29, wherein the valve element (41a) of the automatic valve (41) is a composite body with a substrate layer (42) that is at least unilaterally coated with a non-metal layer (43).

33. (New) A compression spring according to claim 32, wherein the substrate layer (42) of the valve element (41a) is made of metal.

34. (New) A compression spring according to claim 32, wherein the non-metal layer (43) of the valve element (41a) is made of one of the group selected from plastic material and rubber.

35. (New) A compression spring according to claim 29, wherein the energy accumulator is a compressed-gas chamber (19).

36. (New) A compression spring according to claim 29, comprising oil as a pressure fluid.

37. (New) A compression spring according to claim 30, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < 0.5\ F_2$.

38. (New) A compression spring according to claim 30, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $0 < F_1 < 0.1\ F_2$.

39. (New) A compression spring according to claim 30, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $F_1 = 0$.

40. (New) A compression spring according to claim 31, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $-0.5\ F_2 < F_1 < 0$.

41. (New) A compression spring according to claim 31, wherein the automatic valve (41) is designed such that the force F_1 to F_2 relationship is as follows: $-0.1\ F_2 < F_1 < 0$.